

Returning Fire To The Ecosystem

by Carol Jandrall, Fire Education Specialist

FIRES HAVE BEEN A NATURAL PART of Whiskeytown's landscape for thousands of years. Recent studies of burn scars left in tree rings in Whiskeytown's upper elevation forests have helped determine when and where past fires occurred in the park. These studies indicate that some areas in Whiskeytown burned every twelve to thirteen years. These fires were usually started by lightning and had low-burning flames. These fires cleared the forest floor of accumulated forest fuels without killing large trees or destroying the whole forest.

When settlers began developing the area, fires were viewed as destructive and were put out as quickly as possible. Fire suppression and other human changes to the landscape have altered the density and diversity of our forests over the last century. In many areas where trees have historically grown there are now shrubs, dense thickets of small trees, and undergrowth.

Now when a fire starts, it is likely to be hot and destructive, consuming the vast amount of fuels on the ground. These fires are difficult to control and can threaten people and property.

The goals of the Fire Management Program at Whiskeytown are to protect people and their homes from large, high-intensity wildfires, to reduce the build-up of forest fuels, and to bring fire back to the ecosystem. The Fire Program at Whiskeytown uses many different tools to accomplish these goals.



Firefighters use drip torches to lay fire in the dense vegetation on prescribed fires.

PRESCRIBED FIRE

Prescribed fire is used to ignite lowintensity fires when weather conditions are right. The goal of prescribed fire is to reduce hazardous fuel build-up, while safely reintroducing fire to the ecosystem.



Smoke Jumpers from the United States Forest Service work with the National Park Service in building shaded fuelbreaks.

SHADED FUELBREAKS

The United States Forest Service, California Conservation Corps, and private contract crews help Whiskeytown to build and maintain a system of shaded fuelbreaks throughout the park. Shaded fuelbreaks are areas located along roads and ridge tops where forest fuels are reduced in order to modify fire behavior and provide access to firefighters.



The California Conservation Corps worked with the National Park Service on a Fire History Study at

Mature trees, like oak and pine, are left to provide shade, which lowers the temperature of surface fuels and discourages the growth of thick grass and brush that can rapidly carry fire during extreme fire conditions.

FIRE RESEARCH AND MONITORING

Research and monitoring of the park's fire program are critical to gathering data and evaluating fire and fuels management. This summer a research project on South Shore Drive will implement a variety of fuel reduction techniques, including mechanical treatments and the use of goats to reduce overgrown vegetation.

WILDFIRE PREVENTION IS EVERYONE'S RESPONSIBILITY

WHAT TO DO AT HOME

Clear vegetation at least 30 feet around structures

Clean gutters of leaves and needles

Install proper screening on top of chimney or stovepipe

Clear needles and leaves from your roof

Install and maintain smoke detectors

Establish escape routes

Have an evacuation plan

FIRE PREVENTION AT WHISKEYTOWN

Les use established fire rings

Have water and a shovel nearby

 Keep flammable material away from campfire

 Keep campfires small and away from trees, tents and vehicles

 Never leave your campfire unattended and make sure fire is completely out before you leave

Teach children about fire safety

Firefighting, Then and Now the federal government nationalized the effort in the late 1800's. Looking back of

IT IS ONE OF THE MOST PHYSICALLY demanding and dangerous jobs in the world. Job sites are filled with many hazards, ranging from rugged terrain, extreme heat, and falling debris, to smoke -filled air.

Firefighters are dedicated men and women that know how important their efforts are in saving lives, homes and landscapes.

Firefighting has changed dramatically since

effort in the late 1800's. Looking back on the early strategies and equipment, present day firefighters feel lucky to have so many modern inventions and technology at their disposal.

Check out some of the changes between firefighting of the past and the present.

THEN: Early firefighters had simple hand tools and no protective clothing.

NOW: Firefighters wear fire retardant clothing, leather boots, leather gloves, and helmets. Firefighters carry an assortment of hand tools, including chainsaws. Additionally, firefighters carry a life-saving fire shelter and are trained how to use it.

THEN: Early firefighters used a compass and hand-drawn maps to show where fires were located.

NOW: Computer mapping specialists digitize fire perimeters using Global Positioning Systems (GPS). This information is used to quickly create detailed, current maps that increase firefighter effectiveness and safety.

THEN: Fire was considered an enemy that needed to be eliminated from forests. All fires were put out quickly.

NOW: Land managers understand that fire is an important part of the natural world that is necessary to maintain many of the landscapes we have come to love.





Frank Ponte, caretaker of the Tenant Farm House in the Tower House Historic District, heads out to a fire on Shasta Bally. Hubbard Collection.



Another Tool in the Fire Box

by Brad Reed, Fire Use Module Leader

LOOKING AT A MAP OF THE PACIFIC West, several things jump out immediately-first the sheer size of the landscape and relative openness of the country, followed by the almost cardinal straightness of the highway system, marked only by the western mountain ranges. On close inspection you might notice the central location of Whiskeytown National Recreation Area relative to Canada and Mexico.

Whiskeytown's location makes it an ideal place for an interagency fire use module serving the Pacific West Region (CA, OR, WA, ID, NV, HI).

WHAT IS A FIRE USE MODULE?

A Fire Use Module is a team of experienced and trained fire personnel. The mission of the Fire Use Module is to develop and provide self-sufficient, multi-skilled fire professionals with a primary commitment to fire use operations and planning at the national

level.

FIRE FACTS

The Pulaski Tool, a combination axe/hoe invented in 1910, is still the main hand tool used in fire fighting today.

Wildland firefighting shrouds protect the face and neck against short-term flashes of heat up to 1000 degrees Fahrenheit. Fire Use is the combination of Wildland Fire Use and Prescribed Fire applications designed to meet resource objectives. Fire Use can only occur in National Park Service units that have current fire management plans.

Wildland Fire Use is the management of fires ignited by natural sources, like lightning, in remote or wilderness areas away from human developments that have



Module members moniter fire behaivior on the Panther Gap prescribed fire

been specifically approved for this type of fire management strategy. Most Wildland Fire Use occurs in areas where fire has been allowed to function in its natural role.

The Whiskeytown Fire Use Module works an average of 90 days in other National Park and US Forest Service areas assisting with this type of fire. Unlike several larger National Park units, Whiskeytown does not currently allow Wildland Fire Use, although it is being considered for the park's new Fire Management Plan.

Prescribed Fire Use has occurred at Whiskeytown for several years. After careful planning and research, land managers ignite fires in designated areas under specific environmental conditions. This is necessary because decades of fire

suppression have led to fuel accumulation in our forests, creating a hazardous state where large, intensely hot fires are more likely.

The careful application of prescribed fire can help to reduce this risk by reducing the accumulation of forest fuels resulting from years of putting every fire out.

Locally, the Whiskeytown Fire Use Module has conducted many prescribed fires, including the Panther Gap and Shasta Divide prescribed burns recently completed in 2003.

The Fire Use Module is an important tool that Whiskeytown uses to help reduce forest fuels to decrease the risk of large intense wildfires that could otherwise harm our neighbors or precious park resources.

For more information about Whiskeytown's fire management program visit the park's website at www.nps.gov/whis/exp/fireweb, or contact the park's fire information officer at (530) 359-2304.



Become a Junior Firefighter



Become a Junior Firefighter at Whiskeytown and earn a National Park Service Junior Firefighter Patch. Discover the role that wildfire plays in our National Parks. Learn how firefighters manage fire to protect property, lives, and forest health.

Attend the weekly Junior Firefighter Program at the Oak Bottom
Amphitheater on Saturday from
11:00 am –12:00 pm during the summer, or ask at the Visitor Center about how you can become a Junior Firefighter.